

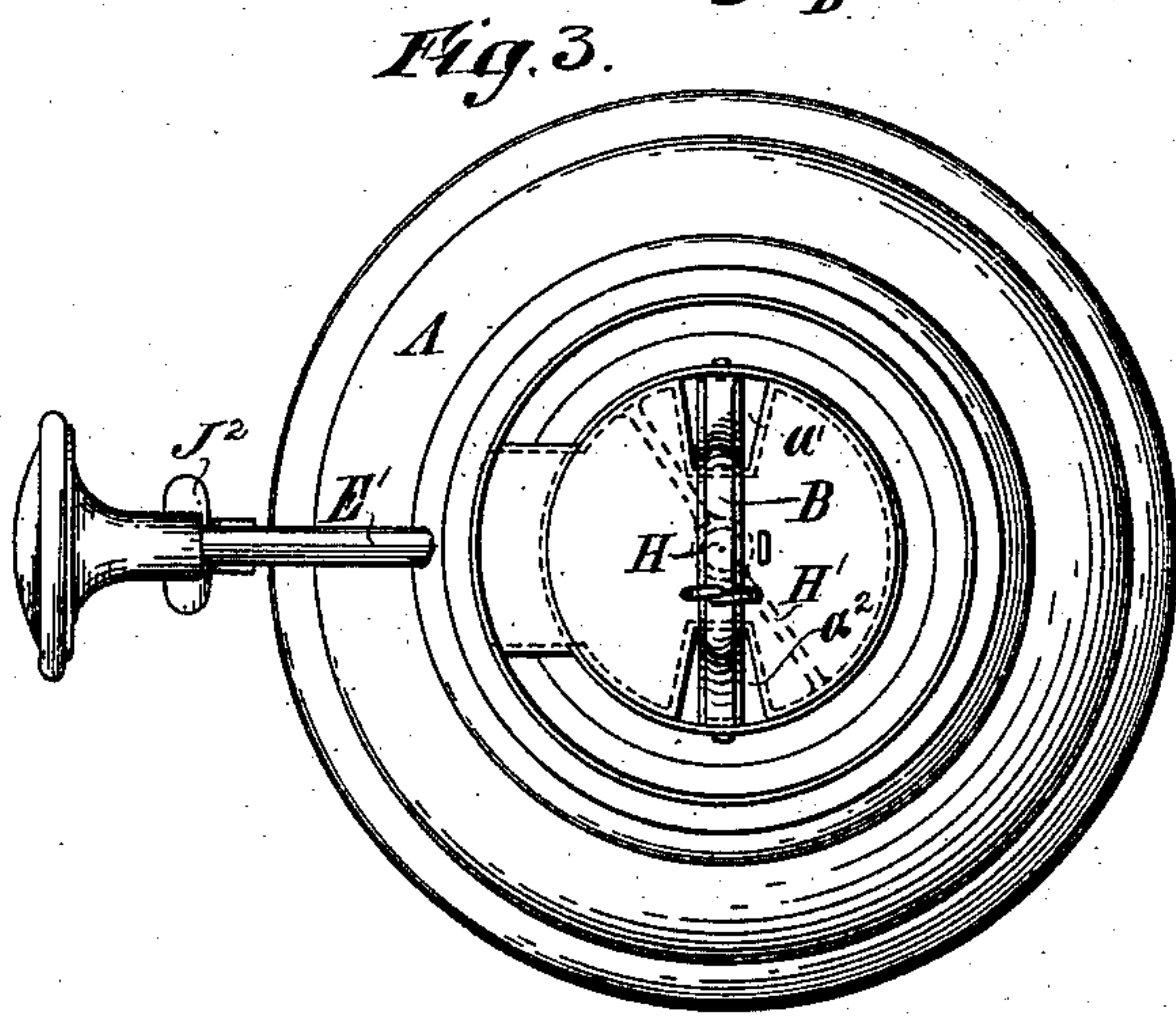
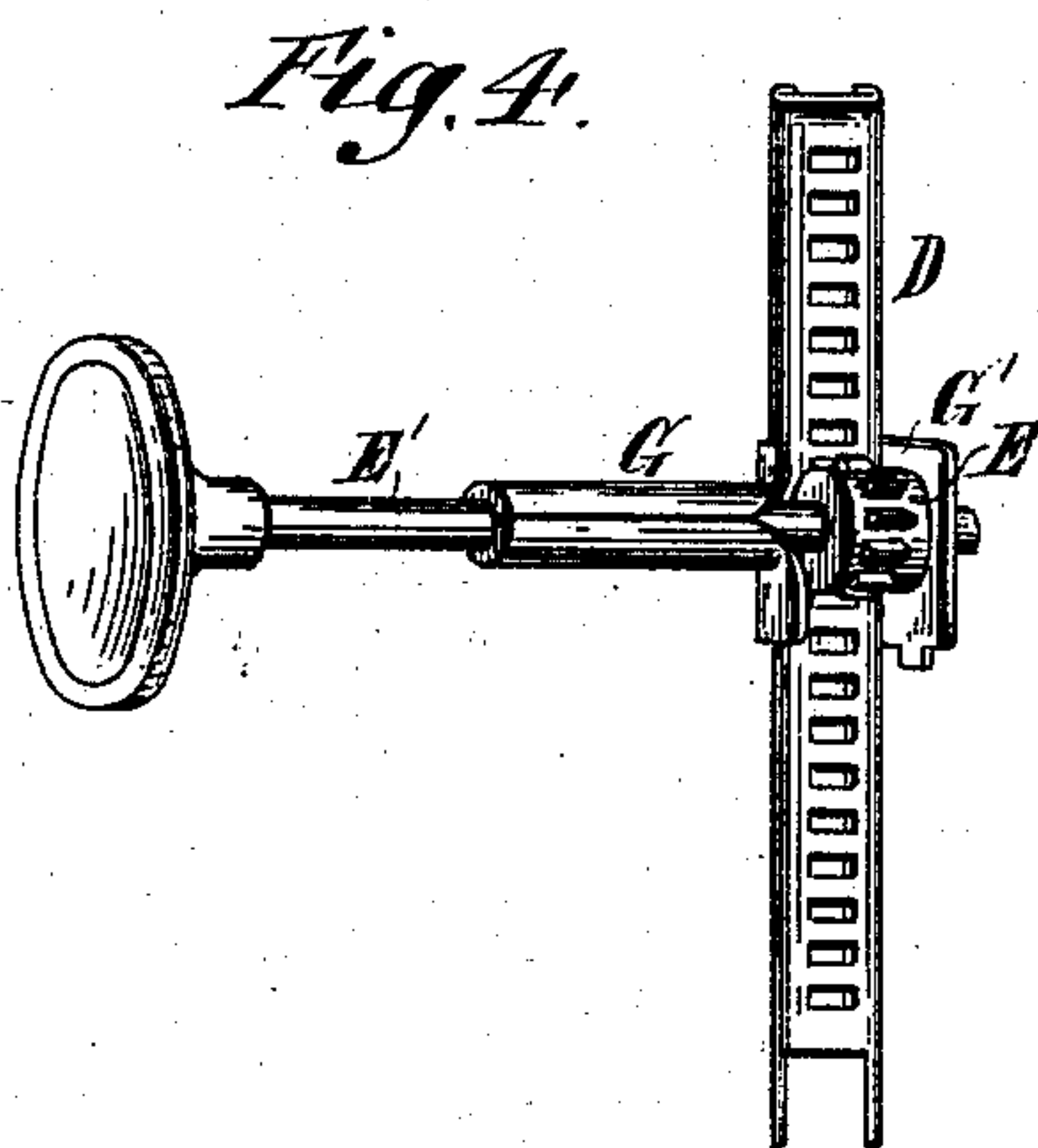
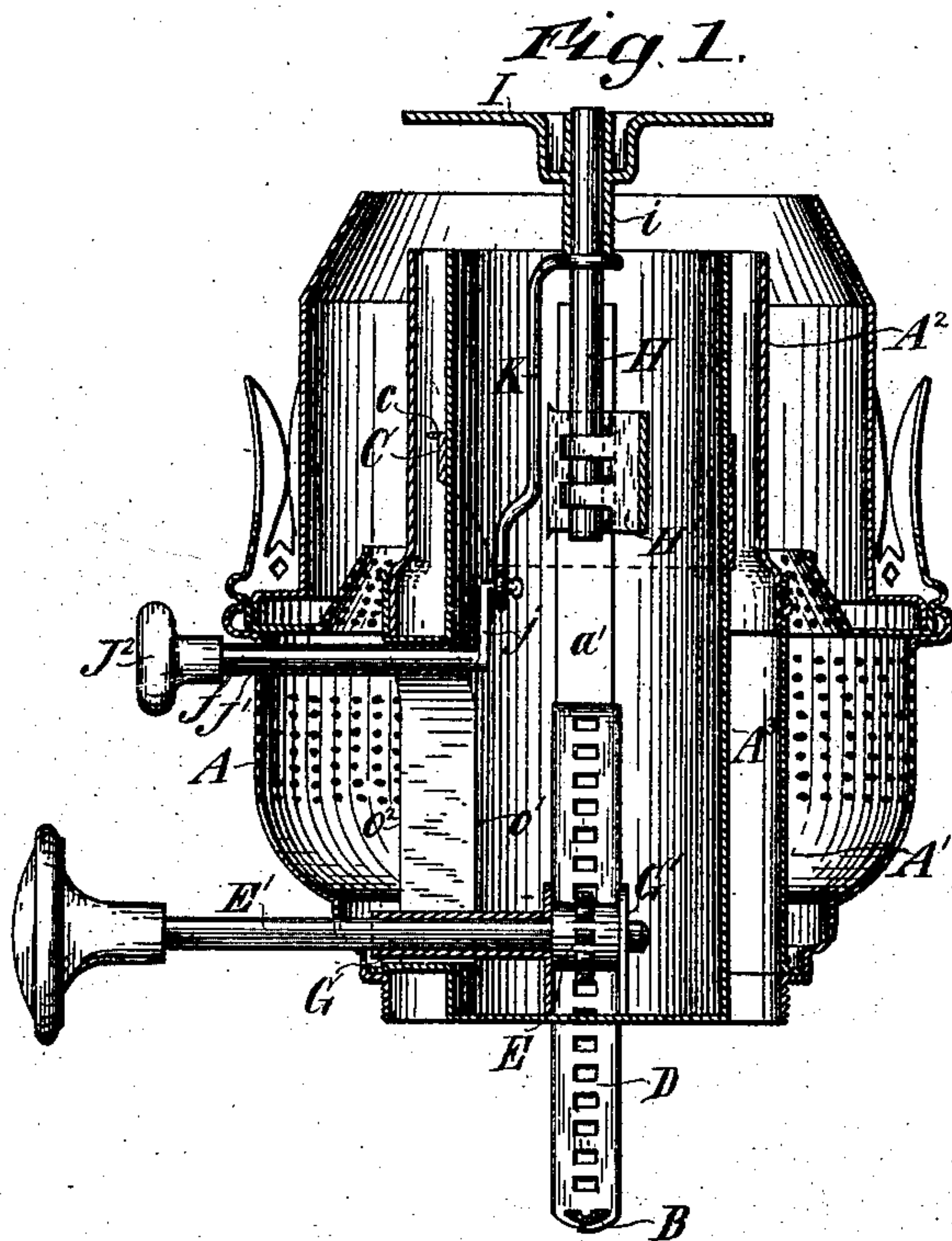
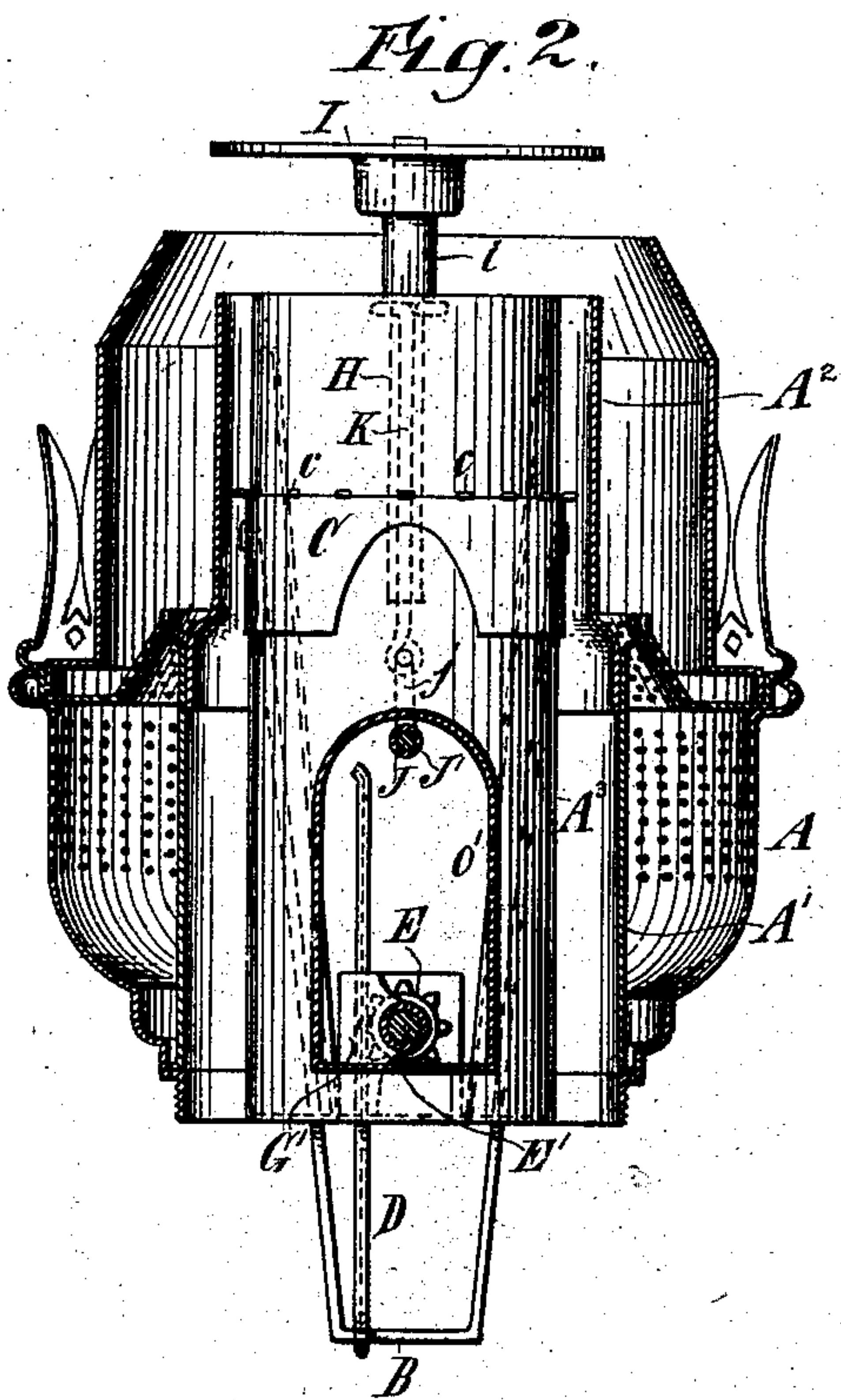
(No Model.)

S. G. STODDARD.

LAMP BURNER.

No. 356,968.

Patented Feb. 1, 1887.



Witnesses
Jas. R. Bowen
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Inventor
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UNITED STATES PATENT OFFICE.

SAMUEL G. STODDARD, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE
BRIDGEPORT BRASS COMPANY, OF SAME PLACE.

LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 356,968, dated February 1, 1887.

Application filed April 12, 1886. Serial No. 198,585. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL G. STODDARD, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented a certain new and useful Improvement in Lamp-Burners, of which the following is a specification.

I will describe in detail a lamp-burner embodying my improvement, and then point out the novel features in claims.

10 In the accompanying drawings, Figure 1 is a vertical section of a lamp-burner embodying my improvement. Fig. 2 is a vertical section of a portion of said burner, the section being taken in a different plane from that of Fig. 1.
15 Fig. 3 is a bottom view. Fig. 4 is a perspective view of a bearing-piece for the rotary shaft, forming part of a wick-adjusting mechanism, and a guide for a rack, which is comprised in such mechanism.

20 Similar letters of reference designate corresponding parts in all the figures.

A designates the main shell of the burner. It has an externally-screw-threaded cylindric base portion, suitable for engagement with the
25 internally-screw-threaded mouth of an oil reservoir or fount, and a cup-shaped or flaring upper portion, which is perforated so as to admit of the passage of air through it.

30 A' A² A³ designate an annular wick-tube consisting of a shell, A', which is affixed to the main shell A by solder or other means, an upper shell, A², which is of smaller diameter than the shell A', except at the base, where it is adapted to fit into the shell A', and a shell,
35 A³, which extends up through the shells A' A². The shells A' A² form the outer wall of the wick-tube, and the shell A³ is detachably connected to the shell A', preferably by means of a bayonet-joint. The shell A³ forms the
40 inner wall of the wick-tube and also a central draft-flue. It is closed at the bottom and secured to the shell A' by means of a flange or strip of metal extending from an opening, o', which is provided in its lower portion, to a corresponding opening, o², which is provided opposite to it in the shell A'. Air may pass from
45 the interior of the main shell A of the burner through the opening o² of the shell A' just mentioned, and the corresponding opening, o', of the shell A³ into the space or flue within the shell A³. This air will ascend to the inner

surface of a flame emanating from the tip of a wick-tube. The inner shell, A³, of the wick-tube is bent at opposite portions to form two longitudinal grooves or recesses, a' a², in its exterior.

B designates a rod, which may be made of sheet metal, channeled, to give it stiffness, and bent into such shape as to have two upwardly-extending arms, which fit into the grooves a' a² of the shell A³, and an intermediate portion which extends across the bottom of the shell A³. These arms at the upper end are connected to a ring, C, by riveting them thereto, or in any other suitable manner. This ring
60 fits snugly around the exterior of the inner shell, A³, of the wick-tube, and is provided with a number of spurs, c, which engage with the wick; consequently, if the ring is moved upwardly or downwardly by means of the rod B,
65 the wick will be correspondingly moved. The portion of the rod B which extends crosswise of the shell A³ of the wick-tube, and between the arms which are attached to the ring C, is secured to a rack, D, which is made of sheet
75 metal, by punching or cutting holes at intervals through the same. This rack engages with a toothed wheel, E, which is affixed to a rotary shaft, E', that extends through the openings of the outer and inner shells of the
80 wick-tube, whereby air is allowed to pass to the central draft-flue, and also out through the main shell A of the burner. The shaft E' is supported in a bearing, G, which consists of a piece of sheet metal bent into tubular form, so
85 as to correspond to the exterior of the shaft, and it has formed integral with it a portion, G', which is bent transversely to the axes of the shaft, so as to form a bearing for the rack D. The guide G' is perforated and bent around
90 so as to fit over the inner end of the shaft E'. This combined bearing and guide G G' may be secured in place by solder or in any other suitable manner to the strip of metal which extends between the openings o' o² in the shells
95 A' A³, through which air passes to the central draft-flue.

H is a post or rod, which is supported in a fixed position by means of a bridge-piece, H', extending across the inner shell, A³, of the
100 wick-tube.

I designates a button or spreader, which is

as large diametrically as the shell A² of the wick-tube, and may be made of sheet metal. It has a tubular portion, *i*, which fits the post or rod H loosely, so that the button or spreader
5 may slide freely up and down along said post or rod.

J designates a rotary shaft, which is journaled in a bearing, J', that is secured in place by solder or otherwise. This shaft has outside
10 the main shell A of the burner a hand-piece, J², by which it may be partially rotated. At the inner end of the shaft is a crank, *j*. Connected to this crank is a link, K, which at the upper end is bent so as to fit around the post
15 or rod H. This link, where it surrounds the post or rod H, is beneath the tubular portion of the button or spreader I.

The shaft J, when rotated so that its crank *j* is in its lowest position, allows the button or
20 spreader to descend upon the tip of the wick-tube, so as to act as an extinguisher to the flame. The shaft J constitutes, in effect, a rocking-arm. When the shaft is rotated in the other direction as far as it can be rotated,
25 the crank *j* will be in its uppermost position, and will have moved just beyond a vertical line, so that the weight of the button or spreader will not cause it to move out of that position. The slightest movement of the shaft J will
30 carry the crank *j* beyond a vertical position in the other direction, and thereupon the weight of the button or spreader will cause it to descend suddenly upon the tip of the wick-tube. The flame will thus be extinguished very effect-
35 ively, and much more so, owing to the sudden descent of the button or spreader, than if it were pulled down by the hand-piece against

the resistance of a spring or other counter-balance.

What I claim as my invention, and desire to
40 secure by Letters Patent, is—

1. The combination of an annular wick-tube, a vertically-movable button or spreader, a rocking arm, a crank on said arm, a hand-
45 piece outside the burner for rocking said arm, and a connection between the crank and the button or spreader, substantially as described, whereby when the crank is moved by the rock-
ing arm above said arm and beyond a vertical position in one direction the button or spreader
50 will be supported in an elevated position, and when moved beyond a vertical position in the other direction the button or spreader will fall by gravity.

2. The combination of an annular wick-tube,
55 a post or rod extending up within the inner shell of the same and secured in a fixed position, a button or spreader fitted to said post or rod so that it will slide along the same, a rock-
ing arm, a crank on said arm, a link extending
60 between the crank and button or spreader, and a hand-piece on the rocking arm outside the burner for rocking the same.

3. The combination, with an annular wick-tube, of a rotary wick-adjusting shaft, E', a rack,
65 D, a carrier connected with the rack, a shaft-bearing, G, consisting of a piece of sheet metal bent into tubular form, and a guide, G', formed integral with said bearing and receiving the rack D, substantially as specified.

SAMUEL G. STODDARD.

Witnesses:

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